Bailey and Nico

Pre-drop Analysis

Materials: Wood sticks, rubber bands, pouch, coins, socks, tape

Since impulse is Force x Time, we want to make the time of impact greater, so that the force is less. The rubber bands will serve for this purpose by stretching when the box hits the ground, which will lessen the impact on the egg. This is done by increasing the time, causing the force to decrease. Momentum is mass x velocity, so by having our exterior be made out of wood and cloth rather than panels of a solid material, it reduces the overall mass, causing the momentum to be less.